FIG. 1

Benefits Service Provider

launch benefits provider servlet — 103

launch employer servlet — 106

Employer

prepare profile of benefits requirements — 105

prepare XML document with benefits requirements — 107

propagate search message — 108

receive bid message — 114

create offer if bid is acceptable — 115

select best bid message — 116

send contract message — 117

receive contract — 123

contract signed? — no / yes — 124

sign contract

Benefits Provider

prepare profile of benefits specifications — 101

transmit profile to benefits service provider — 102

prepare XML document with benefits specifications — 104

receive search message — 109

compare benefits requirements to specifications from XML documents — 110

prepare bid if requirements match specifications — 112

send bid message — 113

receive contract message — 118

verify contract terms — 119

terms agreeable? — no / yes

sign contract — 120

reject contract — 121

send notification to employer — 122

100

FIG. 2

```
<?xml version="1.0" encoding="UTF-8"?>
<BuyerResourceDoc>
  <Network> Marketplace
    <CpuSpeed>1.4</CpuSpeed>
    <Memory>256</Memory>
    <HardDisk>40</HardDisk>
    <OperatingSystem>Linux</OperatingSystem>
    <Task>JAVA</Task>
    <LeaseTime>20</LeaseTime>
    <Compensation>100</Compensation>
    <PerformFact>1.0</PerformFact>
  </Network>
  <ServiceAgreement> Standard
    <Description>
      As many transactions for as little money as possible
    </Description>
    <PricePerTransaction>10.00</PricePerTransaction>
    <Penalty>10.00</Penalty>
  </ServiceAgreement>
  <BenefitsServiceDocument>
    <Initiator>
      <Name>Mutual Life</Name>
      <Address> ... </Address>
    </Initiator>
    <BenefitsService>
      <EnrollmentData> include X12.834 </EnrollmentData>
      <SpecialRules> 401k rules ... </SpecialRules>
      <PlanCosts> ... </PlanCosts>
    </BenefitsService>
    <MatchingRules>
      ...
    </MatchingRules>
  </BenefitsServiceDocument>
</BuyerResourceDoc>
```
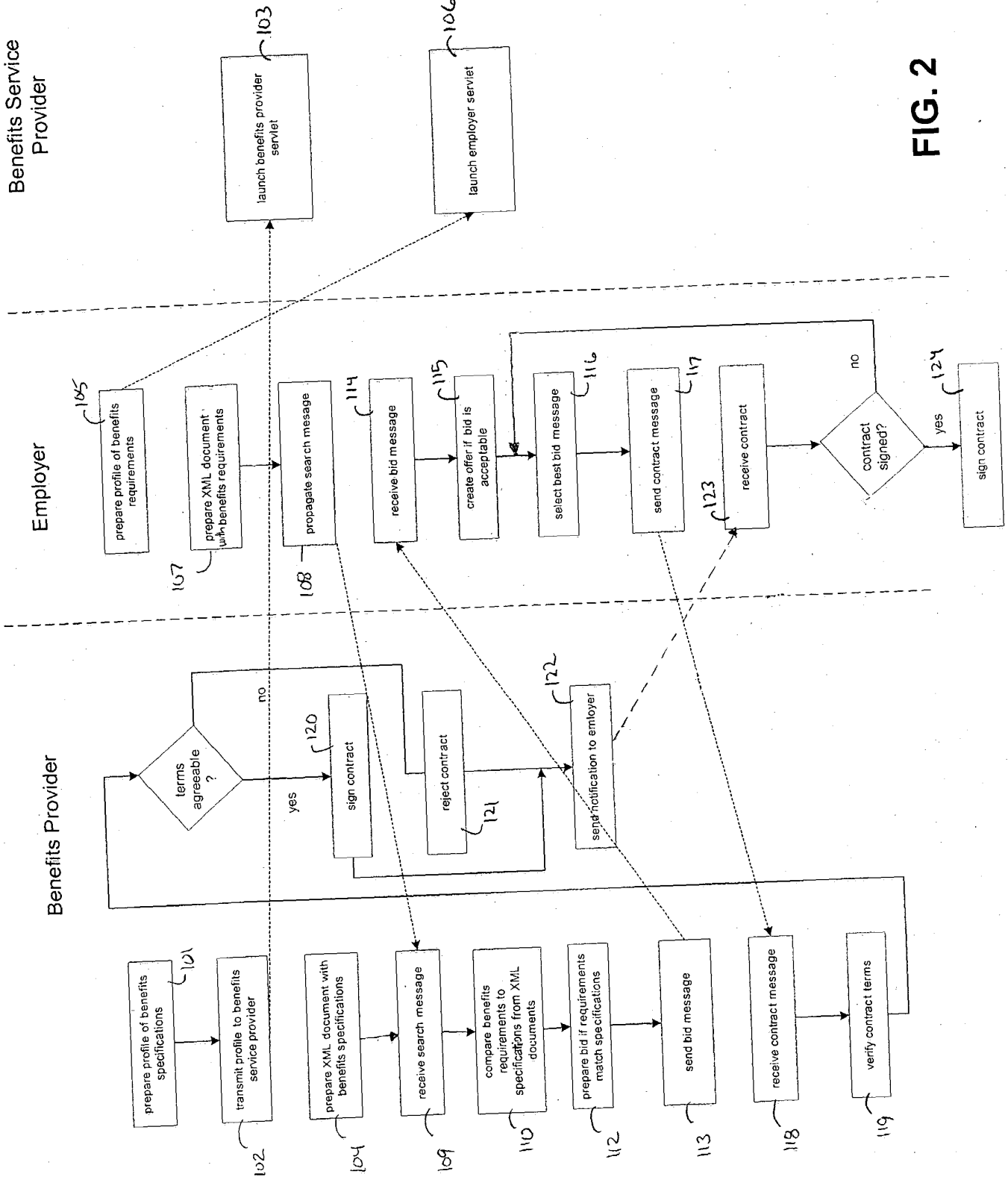
FIG. 3

```
<soap-env:Envelope
xmlns:soap-env="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:Marketplace="http://SAP/Marketplace">
<soap-env:Header>
<Marketplace:UniqueID>Mau1a</Marketplace:UniqueID>
<Marketplace:purpose>search</Marketplace:purpose>
<Marketplace:NodesDepth>3</Marketplace:NodesDepth>
</soap-env:Header>
<soap-env:Body>
   ...Network...
<Marketplace:UniqueID>MyID</Marketplace:UniqueID>
<Marketplace:CpuSpeed>1.4</Marketplace:CpuSpeed>
<Marketplace:Memory>256.0</Marketplace:Memory>
<Marketplace:HardDisk>10.0</Marketplace:HardDisk>
<Marketplace:OperatingSystem>Linux</Marketplace:OperatingSystem>
<Marketplace:Task>java</Marketplace:Task>
   ...ServiceAgreement...
                                          ...

   ...BenefitsServiceDocument...             ...

</soap-env:Body>
</soap-env:Envelope>
```

FIG. 4

```
<soap-env:Envelope
xmlns:soap-env="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:Marketplace="http://SAP/Marketplace">
<soap-env:Header>
<Marketplace:purpose>MatchMessage</Marketplace:purpose>
<Marketplace:UniqueID>MyMatch</Marketplace:UniqueID>
</soap-env:Header>
<soap-env:Body>
    ...Network...
<Marketplace:CpuSpeed>1.6</Marketplace:CpuSpeed>
<Marketplace:Memory>512.0</Marketplace:Memory>
<Marketplace:HardDisk>40.0</Marketplace:HardDisk>
<Marketplace:OperatingSystem>Linux</Marketplace:OperatingSystem>
<Marketplace:Compensation>100</Marketplace:Compensation>
<Marketplace:LeaseTime>5</Marketplace:LeaseTime>
    ...ServiceAgreement...
                                    ...        ...

    ...BenefitsServiceDocument...

</soap-env:Body>
</soap-env:Envelope>
```

FIG. 5

Applicant(s): Andreas Mau
REAL-TIME BENEFITS SERVICE MARKETPLACE

```
<soap-env:Envelope
xmlns:soap-env="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:Marketplace="http://SAP/Marketplace">
<soap-env:Header>
<Marketplace:purpose>MatchMessage</Marketplace:purpose>
<Marketplace:UniqueID>MyMatch<Marketplace:UniqueID>
</soap-env:Header>
<soap-env:Body>
...Network...
<Marketplace:CpuSpeed>1.6</Marketplace:CpuSpeed>
<Marketplace:Memory>512.0</Marketplace:Memory>
<Marketplace:HardDisk>40.0</Marketplace:HardDisk>
<Marketplace:OperatingSystem>Linux</Marketplace:OperatingSystem>
<Marketplace:Price>1.2</Marketplace:Price>
<Marketplace:Compensation>100</Marketplace:Compensation>
<Marketplace:LeaseTime>5</Marketplace:LeaseTime>
...ServiceAgreement...

...BenefitsServiceDocument...

</soap-env:Body>
</soap-env:Envelope>
```

FIG. 6